THIRTEEN NEW SPHINGIDAE.

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(With Plate XX. and 7 text-figures.)

The types are in the Tring Museum if not otherwise stated.

- 1. Coelonia brevis sp. nov. (text-figs. 1, 2, 3, and Pl. XX. fig. 2).
- 3. C. fulvinotatae similis, sed minor, palporum articulo secundo basi lato, deinde conico glabro; alarum posticarum basi supra flava, subtus alba.

Hab. Miarimarivo, Madagascar, 1 &, received from Monsieur E. Le Moult.

Antenna thicker than in *C. fulvinotata* Butl. (1875). Palpus (text-fig. 3) quite different, the second segment being ventrally rough-scaled at the base and then abruptly smooth-scaled; this smooth portion comprises more than half the segment and is conical. Third segment small. Scent-organ of forecoxa not visible, probably as small as in *solani* Boisd. (1833) or smaller. Foretibia much less rough-scaled than in *fulvinotata*, foretarsus without tufts. Outer spurs of mid- and hindtibiae more than half the length of the inner spurs. Pulvillus quite small.

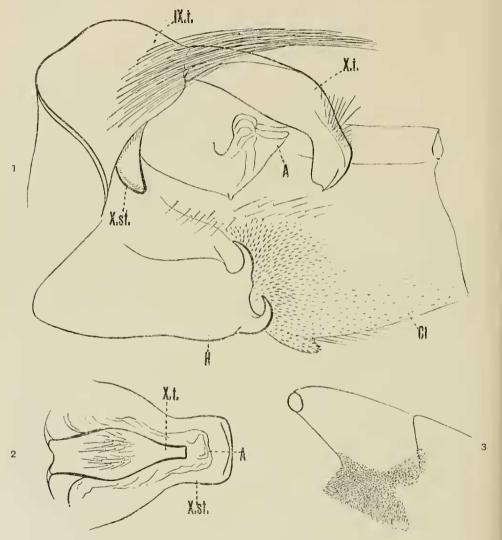
In colouring intermediate between solani and fulvinotata. Face and anterior portion and sides of thorax (upperside) blackish brown irrorated with buff and grey hair-scales (centre of mesonotum rubbed, grey); metanotum on each side with black tuft edged with grey in front and buff behind, no pink tint as in fulvinotata. First abdominal tergite for the greater part black, the other tergites dirty grey with indistinct blackish median line, second, third, and fourth segments with a yellow side-patch edged with black above and behind, the black subdorsal marking also present on the three following segments. Underside inclusive of first palpal segment white, base of second palpal segment buffish white, along eye a black line on first segment, continued on to second. Forecoxae with slight buff transverse band, legs brown, irrorated with white, the spurs, underside of the tarsi, and the apex of the hindtibia greyish white.

Forewing broader than in fulcinotata; markings of upperside similar, but the ground-colour much more grey.—Hindwing blackish brown, with two indistinct blackish bands, anal area shaded with grey, basal area and four-fifths of the costal margin yellow, the yellow area not enclosing a black patch as in fulvinotata.

Underside: Forewing washed with yellow along costal and inner margins, in outer half two indistinct deeper brown bands, the proximal one touching apex of cell.—Hindwing white at extreme base, almost white from base to anal angle, without a distinct yellow tone, a narrow deep brown median band outside cell more strongly marked than the discal band, which is very faint.

Genitalia: Anal tergite (tenth) in dorsal aspect (text-fig. 2, X. t.) elliptically widened before the apex, the latter narrow, truncate; in lateral aspect (text-fig. 1) the apex but slightly narrowed, curved downwards, truncate, with the upper angle produced as a small sharp tooth. Anal sternite (X. st.) truncate, with the angles

very strongly rounded and the apical margin not incurved. Clasper on outer surface with a patch of large, yellowish, multidentate, strongly striated scales; harpe (text-fig. 1, H) with two processes, which are both curved upwards, thorn-like, sharply pointed, the upper one being longer than the lower one; the inner



Figs. 1 3.—Coelonia brevis.—IX. t. ninth tergite, X. t. tenth tergite, X. st. tenth sternite, A anus, Cl elasper, H harpe.

surface of the clasper bears a patch of short spines distally to the harpe, and in the apical area numerous long bristles pointing obliquely frontad.

Length of forewing: 39 mm. Breadth of forewing: 17 mm.

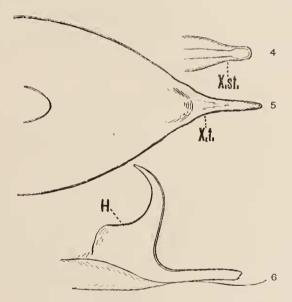
2. Poliana leucomelas sp. nov. (text-figs. 4, 5, 6 and Pl. 20. fig. 1).

3. Corpore supra brunneo, albo-maculato, infra pro maxima parte albo, thorace sine linea nigra dorsali laterali. Alis anticis nigro- et albo-variegatis, area mediana costali nigrina in medio ad marginem exteriorem extensa; posticis nigro-brunneis, ad angulum analem et marginem abdominalem albo-signatis.

Long, al. ant, 66 mm.

Hab. Pnom Penh, Cambodia, 1 ♂ a dom. H. Donckier rec.

Nearest to P. buchholzi Plötz (1880), from W. Africa, larger, forewing more elongate, with the white area placed proximally to the black apical costal area larger and extended ontward to the submarginal spots; behind this white patch the blackish median area, in which the white stigma is situated, is likewise produced to the onter-marginal black spots; the hindmarginal area of the forewing, moreover,



Figs. 4-6. - Poliana lencomelas, genitalia.

is more extended white than in buchholzi. The genitalia are especially different in the harpe.

Scaling of antenna dark brown, grey at the base. Upperside of body dark brown, variegated with dispersed paler hair-scales; a white spot extends from before the antenna on each side of the head on to the pronotum; mesonotum without black lateral line, metanotum with a black double tuft edged with white and ochraceons; abdomen (rather worn) appears to bear two dorsal rows of white dots and at the sides a row of blackish patches partly edged with white. First segment of palpns and base of second greyish white. Breast white, brown near the wings, femora nearly quite white, also the hindtibia, midtibia brown with white ring in centre and at apex, tarsi brown, the segments tipped with white (forelegs missing, with the exception of one forefemur), tibial spur and underside of first hindtarsal segment white.

For pattern of forewing, above, cf. figure. Hindwing brown, fringe spotted

with white, costal margin buff as far as covered by forewing, abdominal margin for the larger part white, at anal angle a white patch divided by two blackish bars, at vein M² a white submarginal diffuse spot.

The underside paler brown than the upper, with a slight purplish tint, white fringe-spots conspicuous, otherwise no distinct markings; forewing in outer half with three diffuse and very obscure darker brown bands, which, apparently, also run

across the hindwing (this wing much abraded in our specimen).

Tenth tergite not divided longitudinally, ending in a slender pointed hook (text-fig. 5, X.t.); tenth sternite broader than the apical portion of the tergite, rounded at the tip (text-fig. 4, X.st., dorsal aspect), the sides being bent upwards, so that the sternite forms a channel. Clasper on the outer surface with a crest of clongate erect friction-scales which lean distad; harpe (text-fig. 6, H) very characteristic, being produced into two processes, one process being ventral and bearing some minute teeth at the tip, the other process directed upwards, being curved in sickle-shape and gradually narrowing to a sharp point. The penis-sheath, as in P. buchholzi, has no definite apical process as in P. natalensis Butl. (1875).

We received this interesting species from M. H. Donckier de Donzell, together with some Papilios and other true Oriental species, and have no reason to doubt that the specimen came from Cambodia.

3. Libyoclanis major sp. nov.

- Q. Clanis bicolor, Rothschild & Jord., Nov. Zool. ix. Suppl. p. 219. no. 181 (1903) (partim).
- δ ?. Major quam L. bicolor Roths. (1894) et L. punctum Roths. (1907); alia latioribus, anticis ut in L. puncto macula nigra subapicali costali notatis, margine exteriore convexo, posticis cinuamomeo-rufis,

Al. ant. long.: 3 50 mm., 9 61 mm.

", ,, lat.: ♂ 19 mm., ♀ 23 mm.

Hab. Sierra Leone, 1 & in Mus. Oxon. (typus), 1 ? in Mus. Tring.

In the Revision of the Sphingidae, i.e., we placed the 9 with bicolor Roths. (1894). The forewings of this specimen are rather worn, and do not well show the black subapical spot by which major and the two species mentioned below are distinguished from bicolor.

Head and thorax tawny olive, being slightly paler below than above; abdomen pale ochraceous buff.

Antennae slender and short, lateral and ventral outlines in 3 almost straight, the segments being but very slightly dilated laterally above the side-groove and

ventrally not incurved. One pair of spars to hindtibia.

3. Wings, upperside: Forewing elay-colour, paler than the thorax, shaded with purplish grey, in proximal half two parallel lines, the anterior one crossing cell at point of origin of lower median vein, the lines more oblique than in bicolor, in onter half an apical streak running into the disc as far as lower radial (vein 4), a diffuse double line from ontside lower angle of cell to hindmargin and another farther distal, blackish brown like antemedian lines, continued to costal margin by diffuse clayish lines; marginal area shaded with purplish grey, except the posterior portion, which is cinuamon-colour; black subapical spot very distinct, with a cloud of purplish grey scales at its proximal side; cell measured from base to lower angle as long as upper median vein; distal margin concave below apex, then very distinctly convex.—Hindwing bright cinnamon-rufous, paler

distally, abdominal margin buff, distal margin somewhat convex in centre, cell shorter than lower radial.

Underside pale ochraceous buff, more buff than ochraceous, proximal half of forewing and abdominal margin of hindwing cinnamon-rufous, distal marginal area of forewing shaded with grey and fuscous, bordered by the very distinct oblique apical streak, apex with a fuscous costal cloud, both wings with two discal abbreviated lines.

 \mathcal{P} similar to \mathcal{S} , markings of forewing above less distinct, probably owing to the inferior state of preservation of the specimen, outer margins of wings more convex, upperside of hindwing and the red colouring of the underside brighter rnfous; rest of underside duller than in \mathcal{S} , hindwing dirty pinkish buff, like underside of abdomen, the two discal lines nearly straight instead of being curved costally as in \mathcal{S} .

Genitalia similar to those of bicolor. In 3 the lobes of tenth tergite with the tip truncate, tenth sternite almost evenly rounded, being longest in the centre. Outline and armature of clasper as in bicolor, except that the apex of the harpe is less curved.—In ? both processes of the seventh sternite sharply pointed, the left process much broader than the one of the right side, but of about the same length.

4. Libyoclanis vicina spec. nov.

 δ \mathfrak{P} . L. puncto Roths. (1907) similis, sed alis angustioribus, posticis margine exteriore parnm concavo, antennis tenuioribus, segmento anali ventrali maris angusto rectangulatim truncato distinguenda.

Al. ant. long. : ♂ 35 mm., ♀ 39 mm.

" " lat.: ♂ 12 mm., ♀ 13·5 mm.

Hab. Cross R., Lower Niger (F. C. Martell), 1 & (type), and Luluaburg, Congo, 1 ?.

Antennae as in L. major, whereas in the β of punctum (the γ is not yet known) each segment is laterally widened above the groove and ventrally incurved in the centre, the antennae of punctum being also longer and thicker. The shape of the wings is different, the wings of vicina being much narrower; cell in forewing distinctly, in hindwing a little longer than lower radial vein; distal margin of forewing longer and less convex than in punctum, the forewing also obviously narrower; distal margin of hindwing slightly but visibly incurved from apex to anal angle, not convex as in punctum.

Head, thorax, and base of abdomen above tawny in 3, tawny-olive in \mathfrak{P} , the colouring in punctum being more buffish clay. Forewing rufescent clay-colour, with transverse lines similar to those of L. major, a double one in proximal half and three in outer half, the lines much darker and much more distinct in 3 than in \mathfrak{P} , oblique apical streak to below second radial, marginal area shaded with fuscous and grey, subapical black-brown spot larger than in punctum.—Hindwing bright cinnamon-rufous, abdominal margin buff, as in the other species a diffuse fuscous marginal cloud in front of anal angle.

On underside the proximal half of forewing and abdominal margin of hindwing bright cinnamon-rufous, less pink than in punctum, rest of wings buffish clay, two abbreviated discal lines on both wings and a prominent apical oblique streak on forewing.

Genitalia: 8, lobes of tenth tergite much narrower than in punctum, rotundate-

acuminate at the tips. Tenth sternite somewhat longer than it is broad apically, sides of the free portion parallel and the apex truncate, the angles being a little rounded off. On line and armature of clasper as in major, the tip of the harpe slightly less spatnliform.—— \circ : seventh sternite with two slender pointed lobes which are about equal in size.

5. Isognathus rimosa molitor subsp. nov.

Isognathus rimosa rimosa Rothschild & Jord., Nov. Zool. ix. Suppl. p. 358 (1903) (partim).

Corpore alisque anticis clarius grisco-albis et pronae l'aciei areis aurantiacis melins expressis ab *I. r. rimosa* facile distinguendus.

Hab. Haïti, type (?) from Cape Haïtien.

In size equalling or surpassing large specimens of rimosa from Cnba. The appearside of the body and forewing purer greyish white. The mesothoracic patagia at most with a slight trace of a black longitudinal line. Forewing as in the palest 9 of rimosa, in 3 with the usual black discal streak. On underside the yellow areas of both the fore- and hindwing as distinct as in I, rimosa inclitus Edw. (1877), but slightly smaller, that of hindwing sharply defined, being distally bounded by a black band; rest of wings much more whitish grey than in Cuban specimens.

The \mathcal{E} and \mathcal{V} which we recorded (*l.e.*) from Cuba as rimosa came undoubtedly also from Haïti.

6. Ampelophaga khasiana malayana subsp. nov.

 \S . AbA. khasianafascia postmediana brunnea alae anticae 5 mm. lata postice valde angustata distinguenda.

Al. ant. long.: 49 mm., lat, 20 mm.

Hab. Batang Padang valley, Perak, 1250 mm., September-October 1910

(E. Stresemann), 1 ?.

The general tone of colouring as in A. k. khasiana Roths. (1894); upperside of abdomen paler from the third segment (discoloured?). Wings broader than in khasiana; forewing with the same number of chestnut bands, but the antemedian band perceptibly broader at the costal margin, and the postmedian one much broader from the costal margin to below the rather strong elbow, thence gradually narrowed, the fourth band thinner than in khasiana, undulated, its posterior two-thirds less distinct than the costal third, which gives the wing the appearance of having the oblique apical line continued straight to hindmargin.

7. Maassenia heydeni comorana subsp. nov.

 $\mathcal{S}.$ Minor quam $M.\ h.\ heydeni,$ macula argentea interiore guttiformi majore.

Al. ant. long.: 30 mm.

Hab. Grande Comoro, September 1911 (C. F. Leigh), 1 3.

The dark chestnut band which runs on the forewing, above, from the costal margin to the hind-angle better defined than in the specimens from Madagascar, the silvery dot which is placed proximally to the lower cell-angle larger, and the proximal three-fourths of the hindwing slightly more greyish. Genitalia as in M. h. heydeni, but the apex of the penis-sheath truncate, not triangularly produced as in the only δ of heydeni examined.

8. Panacra busiris marina subsp. nov.

 δ ?. Regione mediana alarum anticarum minus extensa et minus clare viridi ab $P.\ b.\ busiri$ distinguenda.

Long. al. ant.: 30-32 mm.

Hab. Andaman Is., 2 ♂♂ and 2 ♀♀.

Similar in size to small specimens of *P. b. busiris* Walk. (1856), the forewing less strongly angulate at the distal margin and the upperside of head and thorax, as well as the median area of the forewing duller green, the median area also smaller, especially the narrow posterior portion, the broad costal portion much shaded with olive-black at the double line which bounds the green area distally; outer half of forewing also much more fuscons than in *P. b. busiris*. On the *underside* the basal area of the hindwing is less distinctly green than in *P. b. busiris* and contrasts less with the disc.

We also place here a much-damaged specimen which we have from the Nicobars.

9. Temnora leighi spec. nov.

3. T. fumosae similis, magis grisescens; subtus pallida, ala postica macula nigra pone cellulam sita notata.

Hab. Comoro Islands: larva found on Mayotte, emerged July 10, 1911, and Anjouan (type) July 15, 1911 (G. F. Leigh); 2 33.

Drab grey shaded with a clayish tone, centre of occiput and of thorax brown; below somewhat paler than above, palpi and anterior surface of foretibia whitish grey, a narrow line along eye on first palpal segment brown, widening into a patch on second segment.

Antenna slightly thicker than in *T. fumosa* Walk. (1856), scaling clayish grey mixed with brown, entirely brown on hook.

Wings as broad as in *T. fumosa peckoveri* Butl. (1877), apex of the forewing more produced, outer margin less convex below sinus; markings as in *fumosa peckoveri* 3, but both wings paler, forewing greyer, antemedian band more curved, marginal and submarginal markings below apex less distinct.

Underside pale clayish shaded with drab grey, especially at distal margin; forewing black, or blackish brown, from base to disc; hindwing particularly more grey than in the forms of fumosa, the median band terminating below apex of cell with a black prominent spot, submarginal black dots small but distinct.

Clasper with three large friction-scales; harpe broader than in *T. fumosa*, truncate, not accountate. Penis-sheath as in *T. fumosa* inside with a dense bundle of long stiff bristles. Tenth segment similar to that of *T. fumosa*.

10. Macroglossum lepidum sp. nov. (Pl. XX. fig. 5).

3. M. frukstorferi Hnwe (1895) statura et colore subsimilis. Abdomine lateribus albo-penicillato, palpis subtus, sternis atque segmentorum duorum anticorum abdominalium macula mediana albo-griseis. Ala antica supra lineola discocellulari et linea margini exteriori parallela postice rectangulatim fracta albo-griseis notata; ala postica flava, basi extrema et fascia lata marginali brunneis.

Long. al. ant.: 19 mm.

Hab. Nias, 1 3.

Body olivaceous mummy-brown above, shaded in places with walnut-brown, the hair-scales on head and thorax tipped with grey, mesonotum with grey oblique stripe on the sides, abdomen with a double row of dark brown dorsal patches, on segments ii, iii and iv an orange-yellow side-patch, the first and third patch being smaller than the second and more transverse, the lateral tufts tipped with white, anal fan entirely brown. On the underside the palpi, central area of breast and a large patch on the first three abdominal sternites grey, an indication of a grey spot also at base of the next sternites, rest of abdomen mummy-brown with a tint of walnut, much less brightly coloured than in M. fruhstorferi; fore- and midtibiae and -tarsi buffish grey, hindleg brown, tuft of hindtibia hazel.

Wings, upperside: Forewing sepia-brown, an antemedian black band partly filled in with sepia-colour, widest at hindmargin, reaching costa proximally to apex of cell, basal area below cell with a streak of grey-tipped long scales from base to antemedian band; a grey discocellular transverse spot followed at hindmargin by a grey triangular spot, ontside this interrupted band two black lines, incurved in centre, excurved below costa, parallel up to M1, then diverging and from R¹ converging, the outer line more strongly excurved at R¹ than the inner and in front of this vein exteriorly bordered with grey, between these lines and distal margin, and almost parallel with them, a grey line which is slightly broken (not interrupted) at R¹ and forms a right angle between the median veins, reaching the hindmargin 1½ mm. from distal edge, and costal margin 4½ mm. from apex, ontside this grey line and partly fused with it another grey line commencing at R¹ and disappearing before reaching hindmargin, costally to this line, i.e. in front of R1, a deep brown patch preceded in front of SC5 by a diffuse chestuat patch, at apex the usual dark angle slightly outlined in grey, veins R1 and SC5 partly streaked with grey. Hindwing orange-yellow, the extreme base and a sharply defined marginal band deep chestnut-brown, the band 4 mm. broad in centre, from below costal margin to below M² of nearly even width, then suddenly narrowed, being only 11 mm, broad at anal angle, fringe of abdominal margin brown.

Underside: Ground-colour a pale dull chestnut, shaded over with tawny-olive, much less bright than in M. fruhstorferi, distal marginal band deeper brown, extreme base of wings pale yellow, hindwing with orange-yellow elongate patch before hindmargin, extending to base, but not to margins.

Tenth abdominal (= anal) tergite gradually narrowed distally, with the tip truncate-rotundate; sternite spatulate, broader than the tergite, slightly acuminate, with the edges minutely serrate. Clasper without friction-scales; harpe very slender, almost cylindrical from near base to near apex, the tip deeper brown, narrower, curved upwards, slightly spatulate, no teeth, but before the curved-up apical portion a slight ventral hump bearing some bristles. Penis-sheath nearly as in *M. calescens* Butl. (1882), the apical process horizontal, very long, ending in a long thin whip; this process, which encircles three-fourths of the penis-sheath, bears some teeth at the ventral edge of the wide basal half, and there is a patch of teeth on the penis-sheath proximally to the base of the process; apical edge of sheath not produced into a lobe opposite the base of the process; inside the sheath one (?) rod only, which is obtuse.

The specimen also resembles *M. calescens* Butl. (1882), and *M. castaneum* R. & J. (1903), but is easily recognised by the more prominent grey markings on the upperside of the forewing and the grey patches on the underside of the abdomen.

11. Gurelca montana sp. nov. (text-fig. 7).

3. G. masuriensi similis, corpore grisescente, alis anticis angustioribus, apieem versus linea transversa a margine costali ad ramum primum medianum usque extensa reeta nigra atque quinque maenlis marginalibus nigris acute triangularibus notatis, alis posticis subtus luteo-griseis, margine externo late fusco.

Long. al. ant.: 19.5 mm.; lat. 7.3 mm.

Hab. Tibet, without more definite locality, received from Monsieur E. Le Moult.

Body much worn, apparently without any tawny and golden markings, but beneath with traces of clayish spots (faded?); the scaling which is left is grey, much mixed with black, palpi also without tawny.

Wings longer and narrower than in *M. masuriensis* Butl. (1875); upperside: ground-colour of forewing darker brown than in masur. masuriensis, but the grey shading more extended, giving the wing a more silky appearance, the grey scales remain dark in the centre, only the tips, or the tips and lateral edges, being grey; the grey discocellular bar accompanied on both sides by a black spot, the proximal



Fig. 7. Gurelea montana.

one of these black spots bordered by a grey half-moon, of which the horns join the grey discocellular bar, no tawny tone, about at two-thirds from apex of cell to outer margin a straight black line runs from costal margin to beyond M¹ at right angles to the veins, at margin from apex to M² fine blackish brown, elongate, aentely triangular spots edged with black and accompanied by a grey zigzag line, the upper spot small, apex of wing less pointed than in masuriensis, margin dentate also at M².—Hindwing almost as in masuriensis, greyish at abdominal margin; proximally to marginal band, posteriorly, traces of a separate black line.

Underside black-brown, with an obscure chocolate tint on forewing, a costal subapical spot and a straight but irregularly defined line before hind-angle up to M¹ creamy-grey.——Hindwing creamy grey, outer area purplish black, broad anteriorly, narrow posteriorly, accompanied by short transverse black striae, costal lobe black, a line of the same colour runs from this lobe across lower angle of cell to submedian fold.

Genitalia similar to those of G. masuriensis; the tenth tergite and sternite narrower, particularly the sternite, the sides of which are almost parallel. Upper edge of harpe as in masuriensis excised at the apex, the apical tooth slightly longer than in masuriensis. Penis-sheath (text-fig. 7) different; the apical process

compressed, ascending in a spiral making three-quarters of a coil, the base of the process triangularly dilated proximad, then thin to two-fifths, rest broad and denticulate at both edges, the apex narrowing again.

12. Celerio calida hawaiiensis subsp. nov.

Deilephila calida Rothschild (nec Butler, 1881, err. determ.), Nov. Zool. ii. tab. 9, fig. 1, 9 (1895); id. & Jord., l.c., ix. Suppl. p. 715, no. 672 (1903) (partim; Hawaii).

Alis posticis rufis duabus fasciis una media abbreviata altera marginali completa nigris ornatis,

Hab. Hawaii, Sandwich Islands, 1 ♂ and 1 ♀ (type) in the Tring Museum, the ♀ from Manna Kea, and 1 ♀ in the British Museum, bred by R. C. L. Perkins at Kan.

Whereas in true calida, from the islands of Oahu and Molokai, the upperside of the hindwing is black with a rufons discal band which does not quite reach the abdominal edge of the wing, the specimens from Hawaii have the hindwing for the greater part rufons, the extreme base, an abbreviated median band, and the distal border being black. This black median band is variable in width, and anteriorly more or less extended basad; the black scaling at the base is also variable in extent, being much more obvious in the type than in the specimen bred by Mr. Perkins.

The two specimens in the Tring Museum are not very well preserved; the body is somewhat worn, which accounts for the underside of the abdomen being for the greater part blackish instead of nearly uniformly rufous.

13. Hippotion commatum spec. nov. (Pl. XX. fig. 3).

3. H. reloci simillimum, abdominis linea geminata dorsali magis distincta et lineolis lateralibus griseo-albis haud obliquis, alis anticis pallide cinnamomeo suffusis, linea griseo-alba valde conspicua basin versus longiore; punctis marginalibus multo minoribus.

Al. ant. long.: 3 37-38 mm.

Hab. Rook Island, near New Guinea, July 1912 (A. S. Meek), 4 & &.

Head, thorax above and below, underside of both wings, and upperside of forewing and abdomen, suffused with pale cinnamon. The lines on the body and forewing more sharply defined than in *II. velox* F. (1793). Abdomen above and at the sides longitudinally pencilled with olivaceons black, with a single lateral line of greyish white elongate spots which are parallel to the dorsal line, not oblique.

Wings, upperside. Forewing: distal margin less angulate at second radial vein than in relox, the fringe-dots quite small, the greyish white line which divides the wing into a larger and darker costal area and a smaller and paler distal and posterior area more oblique and, on the distal side, more sharply defined; the line does not reach the hindmargin, but ends in front of it 4 mm. from base at an olivaceons black basal patch; the costal area similarly marked as in relox, subbasal black streak in cell prominent, farther distad another streak placed below the cell, discocellular dot very small. In distal area the following olive-black lines: a double line along main greyish white line, thin, but continuous; farther distally a much more prominent line, thicker, also continuous: these three lines parallel with the greyish white one and extending like this much nearer to the base than in relox, the proximal portion of the lines being almost parallel to the hindmargin. The